

*J. Harrison*

THE SKETCH OF

*A B I L L*

FOR THE

*Improvement of the Medical and Surgical,  
and Veterinary Sciences,*

AND FOR

REGULATING THE PRACTICE THEREOF.

SINCE it is expedient that provision should be made, as well for regulating the Practice of the Medical and Surgical and Veterinary sciences, as for promoting the due education of Practitioners in the different branches; therefore, from and after the

day of

one thousand eight hundred

and eleven, every person in Great Britain and Ireland then practising, or who shall thereafter practise or act for gain or reward as a physician; surgeon, midwife, apothecary, or veterinary practitioner, or who shall sell medicines or drugs, or chemical preparations by retail, as an apothecary, compounder, or vender of medicines or drugs, shall, between the

day of

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enter, or cause to be

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entered, in a register to be kept for that purpose at such place or places as shall be appointed for that purpose, his or her Christian and Surname and place of abode, and the capacity or capacities in which he or she practises as a physician, surgeon, midwife, apothecary, or veterinary practitioner, or in which he sells medicines or drugs or chemical preparations, as an apothecary, compounder or vender of drugs and medicines: and every person who shall, after having so entered himself or herself, or caused himself or herself to be entered in such register as aforesaid, change his or her place of abode, or be desirous of practising or acting for gain or reward, or selling as aforesaid, in any other of the above capacities than that or those in which he or she shall have been first entered, shall, within one month after he or she shall have so changed his or her place of abode, or shall have practised for gain or reward in any other capacity than that or those in which he or she shall have been first entered, cause a new entry to be made thereof in such register as aforesaid; and that at the time of every such entry being made in such register as aforesaid, a certificate shall be given to every person so registered of the capacity or capacities in which he or she shall be registered to practise, or act, or sell, as aforesaid.

*Physicians, Surgeons, &c. annually to take out  
Certificates of Registry.*

EVERY person practising as a physician, surgeon, midwife, apothecary, or veterinary practitioner, or selling medicines or drugs or chemical preparations, by retail, as an apothecary, compounder or vender of drugs or medicines, shall annually, within one month after the first day of

take out a certificate of his or her being registered as aforesaid, and from and after the

day of one thousand eight hundred and eleven, every person who shall practise or act for gain or reward as a physician, surgeon, midwife, apothecary, or veterinary practitioner, or sell medicines or drugs or chemical preparations, as an apothecary, compounder or vender of drugs, without being so registered as aforesaid, and without having taken out such certificate as aforesaid, shall forfeit pounds

for every month, or in proportion for any less time, in which he or she shall so practise or act or sell as aforesaid.

*Physicians, Surgeons, Apothecaries, Compounders  
and Venders of Drugs by Retail, Midwives and  
Veterinary Practitioners, to put upon or over  
their Doors the Capacities in which they practise.*

EVERY person practising or acting for gain, as a physician, surgeon, midwife, apothecary, veterinary practitioner, compounder and vender of drugs,

shall place, or cause to be placed, in legible characters, upon the outer Front Door, or some other conspicuous part of his or her house or dwelling, and also on such building or place as shall be used by any surgeon in his said practice as a surgery, or by any apothecary, compounder and vender of drugs by retail, for selling medicines, drugs, or chemical preparations, the capacity or the different capacities in which he or she shall have been registered to practise, or act, or sell, as aforesaid, and for which he or she shall have obtained such certificate as aforesaid, on pain of forfeiting

pounds for every month of omission, and of for every false statement of his or her register, or certificate, as aforesaid.

*Qualifications necessary to enable Physicians, Surgeons, Apothecaries, Compounders and Venders of Drugs, Midwives, and Veterinary Practitioners to practise Medicine.*

AFTER the day of no person who shall not before that time, have practised or acted as a physician, shall be entitled to be registered, or to take out any such certificate, as aforesaid, to practise or act as a physician, or shall be entitled or allowed to practise or act as a physician for gain or reward, or be entitled or permitted to claim or receive any recompence or remuneration, for such his practice, until he shall have taken the degree of a Doctor or Bachelor of Physic,

Physic, in some British, or Irish, or foreign university, and shall have obtained a diploma or certificate from the proper officer, of having taken such degree; and also shall have been examined by, and shall have obtained a diploma or authority to practise as a physician from the Royal College of Physicians of London, if he reside in England or Wales, from the Royal College of Physicians of Dublin, if he reside in Ireland, and from the Royal College of Physicians of Edinburgh, if he reside in any other part of Scotland than in the counties of Lanark, Renfrew, Dumbarton, and Air, and if he shall reside in any of these counties, then from the faculty of physicians and surgeons of Glasgow.

And no person who shall not before that time have practised as a surgeon, shall be entitled to be registered, or to take out any certificate to practise as a surgeon, or shall be entitled or allowed to practise or act as a surgeon, for gain or reward, or to receive any recompence or remuneration for such his practice, until he shall have been examined by, and shall have obtained a diploma, or authority, to practise as a surgeon, from the Royal College of Surgeons of London, if he reside in England or Wales, from the Royal College of Surgeons of Dublin, if he reside in Ireland, and from the Royal College of Surgeons of Edinburgh, if he reside in any other part of Scotland than in the counties of Lanark, Renfrew, Dumbarton, and Air, and if he shall reside in any of these counties, then from the faculty of physicians and surgeons of Glasgow.

And



And no person who shall not before that time have acted as an apothecary or compounder, or vender of medicines or drugs, shall be entitled to be registered to act, or shall be entitled or allowed to practise or act as an apothecary for gain or reward, or as a compounder or vender of medicines or drugs, in a retail manner, until he shall have served an apprenticeship, by regular indentures, to a physician or surgeon, who dispenses medicines, or has the care of an Hospital or Dispensary, or to an apothecary, or compounder of medicines and drugs, nor until he shall have been examined by, and shall have obtained a certificate from the company of apothecaries in London, or Dublin, or in Edinburgh, from a medical board to be established by the commissioners appointed to carry this act into execution, and if he reside more than seven miles from such company or board, then either from the aforesaid company or board, or from medical persons appointed by the said commissioners for that purpose.

And no person not having before that time practised as a manmidwife, shall be entitled to be registered to practise and act, or shall be entitled or allowed to act as a manmidwife for gain or reward, or to receive any remuneration or recompence for acting as a manmidwife, unless he shall be a physician, surgeon, or apothecary, and shall have obtained a certificate from a board of midwifery practitioners, to be appointed by the said commissioners.

No female, who shall not, before that time, have practised or acted as a midwife, shall be entitled to be registered, or to take out a certificate to practise or act as a midwife, or shall be entitled or allowed to practise or act as a midwife for gain or reward, or to receive any recompence or remuneration for such practice, until she shall have been examined and licensed by a board of midwifery practitioners, or if she reside more than seven miles from such board, either from a midwifery board, or from medical persons appointed by the said commissioners for that purpose.

And no person who shall not before that time have practised on brute animals as a farrier or veterinary practitioner, shall be entitled to be registered, or to take out any certificate to practise as a farrier or veterinary practitioner for gain or reward, or to receive any recompence or remuneration for such practice, until he shall have been examined by, and shall have obtained a certificate or authority to practise as a farrier or veterinary practitioner, from some person or persons to be appointed by the said commissioners.

*Bone-setters, &c. to be allowed to Act and practise under Licences from Justices at Quarter Sessions, with Power to withdraw Licences.*

Not to extend to prevent any person from administering any medicine, or from practising as a bone-setter, or from acting in any other manner in medicine or surgery, in which he shall have formerly acted, provided that such person shall have obtained and have a certificate and licence continuing in full force, and not withdrawn from any three or more magistrates, assembled at any Quarter, or General adjourned Sessions, or any petty Sessions of the peace for the county in which he shall practise; and shall record such licence annually in like manner, as registers are required to be made; and it shall be lawful for the Justices of the Peace, assembled at any General or Quarter Sessions of the peace, for the county or place in which such licence shall have been granted as aforesaid, or the major part of them, to withdraw any such licence whenever they shall think proper, and the clerk of the peace shall thereupon give notice to the registrar by whom such licence shall have been registered as aforesaid, of such licence being so withdrawn as aforesaid.

Every person who shall not have entered into practice before the passing of this act as a physician, surgeon, man-midwife, apothecary, compounder, or vender of drugs by retail, shall pay to the registrar, when his name is first entered upon the register, the sum of twenty pounds, to be ap-



plied to carry into execution the purposes of this act, in manner as is hereinafter directed\*.

*Not to extend to Persons selling Drugs liable to a Stamp Duty.*

NOT to extend to prevent or hinder any person or persons from selling any drugs or medicines on the sale of which any stamp duty is by law imposed, in like manner as they might have heretofore done.

*The Appointment of Commissioners.*

THE great officers of state and others, in England, Scotland, and Ireland, respectively to be the commissioners appointed to carry into execution the purposes of the Act.

*Persons having acted as Commissioners to continue to act notwithstanding removal from Office.*

EVERY person who shall by virtue of any such office, as aforesaid, have been a commissioner as aforesaid, shall continue to be, and be entitled to

\* The Fellows of the Royal Colleges of Physicians of London and Edinburgh have, it is understood, been already made subject to the payment of the above sum as a stamp duty on admission. It therefore seems reasonable that the licentiates of these colleges, and members of the Royal College of Physicians of Dublin, and indeed all practitioners should be required to enter into the profession upon the same terms.

vote

vote and act as a commissioner under this Act, notwithstanding any removal from, or resignation of, any such office, as aforesaid.

*Commissioners of one Part of the United Kingdom may act in any other Part, while resident there.*

IT shall be lawful for all the persons appointed commissioners for England and Wales, and for Scotland, and Ireland, at any time to attend any meetings, and to sit and vote and act as commissioners for any other part of the United Kingdom than that for which they are appointed commissioners, in which they shall at the time be resident, as much as if they had been originally appointed commissioners for such part of the United Kingdom.

*No Meeting of Commissioners in one Part of the United Kingdom to possess Authority over another.*

NO meeting of commissioners held in one part of the United Kingdom shall possess authority, jurisdiction or controul in any other part of the United Kingdom.

*Seven Commissioners may carry Powers into Execution.*

ALL powers and authorities vested by this Act in the commissioners appointed for carrying the purposes thereof into execution, may be used, exercised and put in force by the major part of such of the commissioners as shall be present at any meeting

meeting held in England, Scotland, or Ireland respectively, provided not less than seven commissioners shall be present.

*Commissioners to appoint Places for registering, and proper Officers to keep Registers.*

IT shall be lawful for the respective commissioners herein before appointed for England, Scotland, and Ireland, respectively assembled at meetings to be held in England, Scotland and Ireland respectively, for such respective parts of the United Kingdom; and they are hereby required to appoint some proper place in London or Westminster for England and Wales, and another place in Edinburgh for Scotland, and another place in Dublin for Ireland, for registering and granting certificates in England and Wales, and in Scotland and Ireland respectively, and also to appoint proper officers and persons for keeping the same, and granting certificates, and receiving all sums of money in respect thereof.

*Monies received to be paid into the Banks of England, Scotland and Ireland.*

ALL money to be received for England and Wales shall be paid into the Bank of England, and all money to be received under the same for Scotland shall be paid into the Bank of Scotland, and all money to be received under the same for Ireland shall be paid into the Bank of Ireland, to such account as the said respective commissioners shall order;

order; and the monies shall be drawn for by such person or persons, and in such manner as the said respective commissioners shall direct.

*Commissioners may purchase Lands, and buy or erect Buildings for a Medical School or Hospital, and appoint Professors, &c. in their respective Kingdoms.*

IT shall be lawful for the said commissioners in England, Scotland, and Ireland, respectively, to purchase and hold any messuages, lands, tenements and hereditaments which may be necessary, and to purchase or erect proper buildings for the establishment of medical, surgical, and veterinary schools and hospitals, or to add to any already built or established.

#### *Application of Money.*

ALL sums of money so to be raised for such registering and certificates as aforesaid, or arising from any moieties of any fines, penalties or forfeitures under any provisions to be made, and made applicable, as aforesaid, to the purposes thereof, shall go and be applied to the carrying into execution the purposes intended, in such manner as shall to the said commissioners seem most expedient and best calculated to promote the improvement of the medical and surgical, and veterinary sciences, and the education of the practitioners of the different branches thereof, and may for that purpose be applied in the purchasing of any  
messuages,

messuages, lands, tenements or hereditaments, necessary for the building and establishing, or repairing, or improving of medical and surgical, and veterinary schools and libraries, and hospitals, and botanical gardens, and museums for anatomical preparations, for natural history, mineralogy, &c. and in the payment of salaries to such professors and officers, and persons, as may be appointed by the said commissioners for the managing and superintending the same, and in the providing a permanent fund for the payment of such salaries, and in the payment of all other incidental expences which may be necessary for the purposes aforesaid.

*Commissioners to make Rules, &c. for  
registering, &c.*

IT shall be lawful for the said respective commissioners, from time to time, to make and establish such bye laws, orders, rules and regulations, as may appear to them to be necessary, and for the registering and the granting of such certificates as aforesaid, and for the regulation, government, and management of such Schools, and Hospitals, and establishments, as may be under the controul, or subject to the order or direction of the said commissioners, and for the ordering and government of the professors, officers, attendants, servants, and other persons belonging to or employed in the same, or attending therein for education and improvement in the medical, and surgical, and veterinary sciences. And it shall also be  
lawful



lawful for the said commissioners to appoint such and such number of persons, as may to such commissioners appear to be necessary, for any such school, hospital, or establishment, as directors, governors, and examiners, of such schools, hospitals, and establishments, for the care, and management, and superintendence of the same, and of the professors, officers, attendants, servants, and other persons employed therein, and of all persons belonging thereto, and connected therewith, or attending the same for instruction in the medical, surgical, and veterinary sciences, and for the examination and approval of all such persons so attending for instruction, as aforesaid, previous to their being allowed to practise or act, as aforesaid, and also to appoint such professors, secretaries, and officers, as may be necessary for carrying the purposes intended into execution, in relation either to the registering and granting certificates as aforesaid, or any other matter and things necessary for the improvement of medical, and surgical, and veterinary science, and ensuring a due education of the practitioners therein, and it shall also be lawful for the said respective commissioners to make from time to time, such orders, rules, and regulations, in relation to annual, and regular, and special meetings of the said commissioners, and the mode of summoning and adjourning such meetings, and calling meetings for other special purposes, as may appear to them to be necessary for the insuring due superintendence of the  
 execution

execution of the same and controul over the persons employed and engaged in promoting the purposes thereof.

*Account of Application of Monies to be annually  
laid before Parliament.*

AN account of the application of all sums of money to be raised and applied shall be annually laid before Parliament.

General clauses to be added for recovery of penalties.

One half of all fines, penalties, and forfeitures, shall go to the informer, and the other half shall go to the purposes intended.



16  
AN

# ADDRESS

TO THE

INHABITANTS OF LANCASHIRE, AND OF THE ADJOINING  
COUNTIES,

ON THE PRESENT STATE

OF THE

## MEDICAL PROFESSION,

WITH REMARKS

ON THE

## ELEMENTARY EDUCATION OF THE STUDENT,

AND THE

## BEST MEANS OF ITS ACQUIREMENT.

INTENDED TO SHEW THE PRACTICABILITY AND IMPORTANCE OF  
ESTABLISHING A SCHOOL (ON A MORE EXTENDED SCALE) IN  
MANCHESTER, FOR THE CULTIVATION OF MEDICAL AND SURGICAL  
KNOWLEDGE,

### BY THOMAS TURNER,

MEMBER OF THE ROYAL COLLEGE OF SURGEONS, LONDON,

LECTURER ON ANATOMY, &c. &c. &c.

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MDCCCXXV.





TO  
THE RIGHT HONOURABLE  
ROBERT PEEL,  
SECRETARY OF STATE OF THE HOME DEPARTMENT,  
&c. &c. &c.  
THIS ADDRESS,  
HAVING FOR ITS OBJECT THE EXTENSION OF THE MEANS OF  
EDUCATING THE MEDICAL STUDENT,  
IS, BY HIS PERMISSION,  
INSCRIBED, BY THE AUTHOR,  
AS A SINCERE TESTIMONY OF THE RESPECT DUE TO HIM,  
AS A DISTINGUISHED NATIVE OF LANCASHIRE;  
AND AS HAVING SHOWN,  
IN HIS HIGH OFFICIAL CAPACITY,  
A WARM DESIRE TO PROMOTE THE INTERESTS AND WELFARE OF  
ALL CLASSES OF  
HIS MAJESTY'S SUBJECTS.



## ADVERTISEMENT.

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WHEN the Author of this pamphlet, at his Introductory Lecture, on Tuesday the 4th inst. a second time proposed his plan for the formation of a School of Medicine and Surgery, in Manchester, he had not considered the objects and advantages of it so maturely as to be able to present them in a form fit to meet the public eye. Finding however, that the editors of our journals have been pleased to give publicity to the plan, and that many of the inhabitants have expressed their approbation of it; the author immediately determined on giving a full developement of it, through the medium of the press; and by combining with it, some remarks on the elementary education of the medical student, to put the public in possession

## VI.

of such facts, as would enable them to judge of the practicability and importance of the scheme.—The pamphlet has been written in great haste, amidst the interruption of many professional avocations ; which circumstance, it is hoped, will be deemed a sufficient apology for any inelegance of language, or inaccuracy of composition, that the reader may detect.

*Manchester, October, 1825.*

## ADDRESS .

**I**N the present day, a period distinguished by cultivation of intellect, and the progress of enterprize, the attention of all classes of men is directed to the best means of furnishing to every description of persons the information necessary to the course of life which they follow. The mechanic and artisan will soon cease to be mere automatons in their respective employments, as the institutions established in all large towns, will diffuse amongst them that knowledge, which will enable them to understand, and work upon, the scientific principles of their occupation. With the progress of improvement amongst the lower orders, the intellectual improvement of the higher classes of society must keep pace; it is therefore incumbent on the latter as a duty, at the same time that they give encouragement to the one, not to let the other be forgotten; and not to withhold their sanction from such establishments



as are calculated to maintain their superiority as it has hitherto existed, and which for the welfare of the community ought strenuously to be upheld. I accord in the opinion, that to give to working mechanics an acquaintance with the sciences connected with their trade sufficient to enable them to apply their knowledge in the exercise of it, is highly praiseworthy, and in a national point of view extremely important; but we must look to the effects of it on the state of society, unless accompanied by equivalent advantages enjoyed on the part of those, who are intended to fill situations in a higher station of life.

To cultivate, in the more respectable inhabitants of this populous town and neighbourhood, a taste for the superior accomplishments, and to create in them an interest for literary and philosophical pursuits, is the end of the Literary and Philosophical Society established here; and we shall presently possess a Scientific Institution that will scarcely fail to reflect honor on our town.

For the due qualification of Gentlemen to become members of the learned professions,

certain means have always been provided, and for the professions of theology and law, they are still adequate, since they have not been materially changed by the character of the times ; but in our own profession the means are *not* adequate to the ends to which they are directed, a more extensive grasp of knowledge being necessary for the safe and successful practice of it, than is in the power of many of its members to obtain. To give then to the medical student the power to acquire competency to the discharge of his important duties is a desideratum which we should endeavour to supply. It remains then only to take one step more to raise Manchester high in the estimation of the world, and to place her nearly on a level with the metropolis ; it is to be effected by furnishing the means of better educating that class of students upon whose future qualifications the best interests of mankind depend. It is an evil replete with mischievous consequences, that whilst the extension of general knowledge should be so much the aim of public exertion, the medical student is still limited to the same resources, which have existed almost from time immemorial ; it is the duty of members of the medical profession to expose this error, and it is the interest of all to correct it.

The present state of the medical profession is a subject in which none can be otherwise than deeply concerned. A profession to which are attached responsibilities of the highest character, has a just claim to inquiry, and every man should make it a part of his business to ascertain whether the individual in whom he reposes his confidence, has been duly and regularly educated. A modern writer says, "It must strike the mind of every enlightened individual, who takes a survey of the present state of the medical profession in this country, that whilst there are to be found in it, some, who by their talents and intellectual attainments, reflect credit on themselves, and the profession to which they belong; at the same time the *large mass* of its members is deplorably ignorant, and this we feel assured may in the majority of instances be traced to the defective education they have had the misfortune to receive." This "defective education" arises from circumstances that can in many instances be controuled, it becomes therefore a duty, to show how this great evil can be remedied, and to put this in the most striking point of view, I will first give a brief sketch of the Elementary Education of the medical student.

The wish of a parent to bring up his son to the profession of medicine or surgery, ought to be seconded by a corresponding wish on the part of the son. Family prospects, and circumstances may influence a father to recommend to his child a particular pursuit in life; but those considerations should give way to a disinclination, or distaste for the studies connected with it.—Without a fondness for these, the student will never bestow on the acquisition of professional knowledge those exertions, which are indispensable to the accomplishment of the arduous task imposed on him; nor will such a man ever rise above mediocrity in its practice. There is no profession that requires more assiduity and application than the medical; none, where the extent of knowledge required for the successful practice of it is so unbounded; none more interesting when the objects of it are congenial to the temper of the mind; but none, which, in the absence of congeniality, is so calculated to excite disgust.

It is not my intention to say much on the information which the young gentleman who is designed for the medical profession, should



possess ; but it will be well to enforce the necessity of a few preparatory accomplishments.

He should have a good knowledge of the latin and greek languages, particularly of the former. An acquaintance with the latin language is indispensable ; and as most of the terms employed in medicine, surgery and the auxiliary sciences are derived from the greek, this language will give much assistance to the memory in retaining the meaning of scientific terms. But latin and greek are not the only tongues with which he should be familiar ; from the labours of our continental brethren we gain much useful information, hence it will be advantageous to the student to read their works, particularly those which emanate from the French school. There are also other branches of knowledge that should not be overlooked, amongst these we may class mathematics, and the elements of natural philosophy. How, and where, all these studies can be followed, are questions which do not come within my design ; fortunately many of our public seminaries are so conducted as to furnish facilities for those purposes, without the necessity of incurring the expense attendant on a College education. In brief, the future medi-



cal practitioner must be liberally educated, and must be taught not to disregard any branch of useful knowledge, though the relation it may hold to the medical profession may not be more immediate, than it does to other pursuits in life. Every kind of information in literature, science, and the arts may be turned to a valuable purpose, for independent of other advantages which are sure to accrue from miscellaneous studies, they serve to enlarge the scope of the mind, and to destroy that pedantry, stiffness, and repulsive gravity, which are too often associated with the medical character. Our profession has its *real* dignity, and the power to command respect; but it has no claim to those qualities unless the members of it have such acquirements, as will enable them to perform all the duties of their important calling. Dignity in physic, as Dr. Gregory properly observes, is not to be supported by a narrow and selfish spirit—by self-importance—by a formality in dress and manners—or by an affectation of mystery;—but by the superior learning and abilities of those who practice it,—by the liberal manner of gentlemen, and by that openness and candour which disdain all artifice, which invite a free inquiry, and thus boldly bid

defiance to all that illiberal ridicule and abuse, to which medicine has been so much, and so long exposed. When a determination has been made on the nature of the youth's pursuit, the parent should recommend that plan of education to be adopted, which is best fitted for the attainment of the objects of that pursuit; so that his son may cultivate an early acquaintance with those branches of knowledge, the most essential to the sphere of life, in which he is intended to move.

We are to presume then, that when a young gentleman begins his professional career, that he has had the necessary classical education, and other instruction; and that he is now prepared to devote his time exclusively to the subjects of the profession he has chosen. In the study of medicine where so much is to be learnt, it is highly desirable that we should facilitate labour. In the early period of a youth's apprenticeship every thing is drudgery, because he cannot adapt the means to the ends; it is therefore of immediate importance to conduct him in the right way, and to show that his early labours will be crowned with an abundant harvest.

His first studies must embrace the sciences of chemistry and botany, which are the key stones to pharmacy, and materia medica. Pharmacy without chemistry would be productive of more harm than good, as our ignorance of chemical laws would lead us to bring together incompatible substances, the connexion of which, might render their operation inert, or convert them into dangerous compounds. After learning the nature and properties of drugs, the student must know how to apply them to practical purposes, and the basis of this knowledge is the study of the structures and functions of the human body, and the systems of parts on which medicinal substances exert their influence.—The anatomy and physiology of parts in a state of health must precede his attempts to investigate the phenomena of disease, and the effects produced by morbid causes. But to understand certain functions he must be acquainted with other branches of science; without the assistance of mechanics, he would be unable to determine the principles of muscular motion—without pneumatics, he would not be able to explain the beautiful process of respiration, and the physiological results of this func-

tion—without optics, he could not explain the operation of the humours of the eye on the rays of light in their transmission through them—and without acoustics he would be ignorant of the manner in which sound is conveyed to the sensible expansion of the auditory nerve; thus mechanics, pneumatics, optics, acoustics, and other branches of natural philosophy are the auxiliary sciences to the study of medicine, inasmuch as they elucidate certain phenomena in the animal economy. Anatomy and physiology are the basis of pathology, without them, pathology, which refers to disease whether of a medical or surgical character, is quackery, and as to acquire a competent knowledge of pathology is the ultimate aim of the student's researches: with the knowledge of these branches, on which its foundation is laid, he will complete his professional education. The question now to be answered relates to the time when these different studies should be pursued.—The first objects of the medical student's attention are chemistry, botany, pharmacy, and materia medica. The two former are essential to the two latter. The first year of the apprenticeship ought to be employed in gaining the elements of these sciences; having



done this, the minutiae, which appertain to them, may be followed at a future period:—In the second year he should study the branches of natural philosophy which are more immediately connected with his professional calling. With this preparatory instruction he becomes competent in the third year to attend to anatomy and physiology.—In the fourth year in addition to anatomy and physiology he will do well to pay some attention to hospital practice.—And in the fifth and last year, he should re-survey and re-study the various branches of medical science, in order to apply them to the principles of medical and surgical practice.

This arrangement of time and studies may be adopted with the best possible advantage to the student, and without much, if any interference with the convenience of his master.—It may be supposed to encroach a little on the privileges of the latter, who takes a pupil with the expectation of deriving assistance from him in the dispensing of medicine and otherwise, but who would not be thus benefited, if the student's time be spent in an attendance at the lectures, and on the other advantages of the school; but I would ask, is not the master's

expectation more likely to be realized by allowing his pupil to partake of these means of improvement? since they will render him more efficient in tendering the assistance required. Still I can imagine that more time may be deducted from the business at home, than would be compatible with the master's views or convenience, and therefore would lay down the following mode of proceeding as likely to obviate the objection.

It is presumed that every young gentleman, who is bound an apprentice to a surgeon, a surgeon and apothecary, or to an apothecary, is indentured for a period of five years. To pass the College of Surgeons, a young man must produce a certificate of his having been engaged six years at least in the acquisition of professional knowledge: to qualify him for examination at the Apothecaries' Hall, he must testify by the production of his indenture, his having served an apprenticeship of five years: what ought to be done then is to apportion his time, and to show how it can most profitably be spent, in professional acquirement.

When he is first bound an apprentice, it is

not safe for the practitioner to trust him with the dispensing department, as his ignorance of drugs disqualifies him for more than the mechanical part of his employment; it is therefore the interest, as well as duty of the master to afford to his pupil the means of acquiring a competency of knowledge by attending lectures, which are so arranged as to give a condensed view of the most useful points. By this method, and by diligent reading, he will soon become deserving of confidence, and may be entrusted with the important duty in question.—The pupil then should as early as possible be allowed to attend lectures on pharmaceutical chemistry, and botany, and the advantages to the master, which may result from the loss of service thus incurred, *will amply compensate* for the temporary inconvenience to which he may be consequently subjected.—During the second winter the student should be permitted to enter at the lectures on natural philosophy: and during the remaining part of his apprenticeship the structures and functions of the body, and the application of anatomy and physiology to medicine, surgery, and midwifery, should be the objects of his researches. He will thus be qualified to extend his views,



and to avail himself of future opportunities of improvement, with the best possible chance of benefit.

As most practitioners have more than one young gentleman under their charge at the same time, and as the delivery of lectures should be so arranged, with respect to time, as not to interfere with each other; it is in the power of every master to allow his pupils to embrace these advantages; and I am quite sure that the good feeling which exists between medical men and their pupils is such, as to lead them to encourage, rather than to oppose this reasonable requisition,—IF I could for a moment suspect the contrary, I should feel it my DUTY to appeal to parents, who must naturally have at heart the welfare of their children. Their sons are destined to perform their part in a learned, active, and honourable profession, and to do this, they must possess such an extensive range of knowledge, as renders it imperative that not a moment of their time should be mispent. There is no short way to science, and to the art of healing, the road is very long, for it necessarily implies profound study, deep research, and accurate observation. The

habit of study, therefore, must be contracted with the entrance into professional life, and ought not to terminate until the career is ended.

Unless the student is well grounded in elementary knowledge, he will not profit much from the lectures which he hears in London, Edinburgh, or any of the superior schools; for the lectures there delivered are not purely rudimental. Every professor in these places, presumes, that he is addressing young men who are not tyros in the profession, but who have profited by the comparative leisure of their apprenticeship: It is a notorious, though melancholy fact, that many students from the country who neglected to pay early attention to professional acquirement, have failed to derive that improvement which such lectures are calculated to afford; and being discouraged by difficulties which appeared insurmountable, they have actually given up their profession in despair. I would, in a friendly way then, warn the medical student against the snare which has caught so many, viz. *that the period of his apprenticeship is of no great value.* It is a gross error to suppose that the schools of London, or elsewhere, can store his brain with sufficient

practical lore, without a preparation for its reception : and if he harbours this opinion, he will discover the absurdity of it, when it will be too late to rectify the consequences of so palpable a mistake. It is a truth confirmed by experience, that the love of science increases in the same ratio as our advancement in it ; and it is not less true, that our advancement is always in proportion to the labour we bestow in the acquisition of fundamental principles ; these remarks will, I hope, serve to stimulate the student to begin his labours early ; to make a diligent use of that time which is valuable *principally* to himself ; and to profit from the leisure that is not likely to be interrupted by the miscellaneous occurrences to which he will be subjected in after life. He must use his own exertions, when the means of facilitating labour are given to him. Industry in acquiring knowledge will lead to fame and fortune ; but the neglect of these means will plant a sting in his bosom, which will torment him sorely, when the period of reflection tells him, that he has mispent the most valuable portion of his life.

The preceding remarks on an attendance at lectures, are more particularly applicable to the method of regulating the time of those stu-

dents who reside in Manchester, or its vicinity, or in any other situation where the means can be supplied; but there is a large mass of students residing at different distances, who cannot attend to these recommendations, for want of opportunity.—It is much to be feared that medical pupils living in country situations have their knowledge limited to the art of dispensing medicine, or *at most* to that, united to an attendance on cases that they are not qualified to treat, or to profit from; the only remedy for this evil consists in the existence of an understanding between the masters and the parents of pupils, that for one or more seasons, the student shall be allowed the privilege of taking up his abode *at the seat of instruction*.—I should advise that this indulgence be granted the third year, and the pupil will then be able to give important assistance to his master during the remainder of his engagement.—Some country surgeons adopt the plan of sending their pupils to London the third or fourth winter, with a bona fide agreement that the time thus spent shall be exclusive of the term of apprenticeship; but it is to be hoped that the necessity of a departure to such a distance from home will soon cease to be necessary, and



that the pupils of Lancashire, and the adjoining counties, will have the means of improvement very near at hand. This will lead me to the developement of my plan for the formation of a School of medicine and surgery in this populous district, a means by which all our views of the elementary education can be accomplished.

The main objects which the plan should embrace, will of course be anticipated from what has been already stated, but it will be well specifically to mention them, in addition to others which must be included.

1st.--The delivery of lectures on the various subjects of medical science is indispensable, and these must be so arranged as to constitute a complete system of professional instruction.

The subjects of the lectures must be,

Pharmaceutical Chemistry.

Botany.

Materia Medica.

Natural Philosophy,

Human and Comparative Anatomy,

Human and Comparative Physiology,

Principles and Practice of Surgery,

Principles and Practice of Midwifery,

and the

## Principles and Practice of Medicine.

2ndly.—The means of prosecuting Practical Anatomy.

3rdly.—A Library of Books on Medicine, Surgery, and the auxiliary Sciences.

4thly.—A Medico Chirurgical Society, for the purposes of conversation, and reading papers.

5thly.—Prize Essays, or Honorary Rewards, for dissertations on proposed subjects.

To carry these objects into effect, a commodious Lecture Room,—Private Apartments,—a Library, and other conveniences, will be required.

MANCHESTER, above all other places, must be considered as the best situation for a NEW MEDICAL SCHOOL. A town almost equal in importance to London; honourably striving to rival the metropolis in many respects; and having a population *greater* than that of any town in England, must be selected as the best calculated for this purpose. But it is not on internal importance merely that we ground our choice, for in addition to this circumstance, her topographical situation, and proximity to a densely populated country are much in her



favour; and if we form an estimate of medical pupils from the extent of population; Manchester and its environs, including a circuit of 40 miles, would furnish a number *more than equal* to that of London, and 40 miles about it. When we look to our public institutions for the relief of the sick; our Infirmary which admits annually under care, 2000 *more than the largest hospital in London*, exclusive of the patients admitted into our Lunatic Asylum; our Fever Hospital; our Lying-In Hospital; our Workhouse Hospitals; our Eye Institution; our Lock Hospital; &c. &c.; we have a right to put in our claim as best able to furnish those requisites, which every medical school *must* possess in order to be effective.

Presuming this to be accorded, we must now prove it to be of NATIONAL IMPORTANCE that there should be ANOTHER MEDICAL SCHOOL IN ENGLAND, from too much encouragement having been given to pupils to leave this country for the continent. The restoration of peace has thrown open to us the Parisian schools, which a war of more than 20 years duration had excluded from the medical student. The advantages which they offer, in some respects, are

superior to those of our own schools, as the laws of France sanction, what the laws of our own country interdict. In France, Anatomy is known to extreme minuteness. Physiology has attained to a high degree of perfection.—The facilities for practical anatomy are unparalleled. The attendance on public lectures, and hospital practice, is without a gratuity ;—and admission to the public museums and libraries, is free. The student can *there* be educated for a trifling sum ; but *in this country*, the medical education is highly expensive, which is in a great measure attributable to the invariable consequence of monopoly.

The student has advantages in Dublin, superior in many respects to those which he enjoys in the English and Scotch schools. I would not say, that the professors of Paris, or Dublin, are *better* qualified to teach than those of London, Edinburgh, or Glasgow ; but many of them are *equally learned*, and this consideration added to certain facilities that the latter places *afford not*, must operate in favour of emigration, and thus threaten the eminence of the schools of England and Scotland.—It behoves us then to lend our hand to prop our

our institutions ; it is a matter of NATIONAL POLICY, that we should have an auxiliary establishment some where, and it is obviously a matter of RIGHT, that it should be seated in a town next in importance to the metropolis itself, and which, geographically considered, may be designated the heart of the united kingdom.

We do not wish to take to ourselves college privileges, and to grant diplomas ; but we hope to have the ability to prepare students for their future honors, and thus to lessen the *expense*, and *time* which have hitherto been necessary in order to obtain them.—If this latter advantage could not be gained either by courtesy, or legislation ; the Institution, under its most humble pretensions, would offer to the medical student the same advantages that St. Paul's, Westminster, Eton, and other chartered schools do, to the clerical scholar.—These places do not grant ordination, but they give preparatory instruction, and confer honors, *as we should do* ; and thus the student is rendered competent to enter on his finishing studies, with the best possible claims to future honor, and eminence.

It is not necessary to enumerate the *many* *benefits* that the medical student, and the community at large will derive from the establishment which I have proposed ; but I will briefly state, that an advantage of no small importance which will be engendered by it, is the *feeling of emulation*, which is a very active cause of improvement in science, and of advancement in those who cultivate it.—The history of past ages must convince us, that improvement keeps pace with the opportunities and encouragement given to the cultivation of learning ; and the same has proved, that even the love of science may be suppressed, if the means of acquiring it be difficult to obtain.

With respect to the influence of emulation in promoting the progress of the student, Knox properly remarks, “ emulation cannot be excited without rivals, and without emulation instruction will be always a tedious, and often a fruitless labour. It is this which warms the passions on the side of all that is excellent, and often counterbalances the weight of temptations to vice and idleness.—Honourable emulation is the principal spring of diligence and activity.”



The proposed plan appears to me to be well calculated to do much good, and therefore worthy of being adopted. It cannot fail to advance science, and to give great facilities to the medical student in the prosecution of his laborious pursuits. Talent is a gift of nature ; education only directs and exercises the reasoning faculties ; but to have this effect, it must be governed by *a regular system* ; its important advantages will then be secured to society ; the acquisition of knowledge will become easy ; and its blessings permanent. Although every medical man must at present feel deeply interested in the accomplishment of the project, there can be no doubt but that their interest will increase with the increasing proofs of its usefulness ; and a similar feeling must pervade the several classes of our townsmen.

It is scarcely to be expected that all the objects of the school will be *immediately* carried into effect, but they *must* be begun ; indeed, *they have been put to the test of experiment*, on a small scale, and for the beneficial effects which have resulted from them, I will venture to appeal to some of the rising members of the profession, who have been educated in this

neighbourhood. This foretaste encourages me to assert that the plan is not chimerical, but fully practicable, and requires only PUBLIC SANCTION to place it on a secure and substantial basis.—MANCHESTER HERSELF has rapidly passed from humble beginnings to what she now is; from a humble beginning, such as our SCHOOL now presents, it will, by public patronage, be raised high in the scale of usefulness.—By the active co-operation of my medical brethren, and by the liberality of our townsmen, and the inhabitants of the neighbourhood, I think the success of the project is certain, as there is no obstacle that may not easily be surmounted by *determined perseverance*.

I do not think it necessary to offer an apology for obtruding this pamphlet on public attention. I disdain every other feeling than the wish to be in some measure instrumental in benefiting the junior members of the profession, by placing them *on a proportionate level* in their acquirements, with the generally improved state of society; but to do this, my efforts will be insufficient without collateral aid.—I have presumed to suggest, it may, or it may not, be the



will of others to adopt the suggestions; but from what this town has already done for the promotion of Literature, Science, and the Arts, it may confidently be expected that she will do much more.—There is a praiseworthy pride now existing amongst the inhabitants of this district of England, to raise Manchester high in the estimation of the scientific world; and we have always found, that Institutions established with a view to the PUBLIC GOOD, have been fostered and supported with that degree of liberality which reflects honor on our town.

We have our Literary and Philosophical Society; our Natural History Society; our Mechanic's Institution; to which may be added our Royal Institution, now in progress; OUGHT WE THEN TO BE BACKWARD IN ENDEAVOURING TO FORM A SCHOOL FOR THE CULTIVATION OF THOSE SCIENCES WHICH HAVE THE MOST DIRECT INFLUENCE ON THE HAPPINESS OF MANKIND? WE HAVE THE MEANS, AND OUGHT TO USE THEM.

